

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter presents the discussion of the research method. The researcher attends to explain about research design, population and sample, research instrument, the technique of data collection, and technique of data analysis. The explanation of each section as follows:

#### **A. Research Design**

The research of this study was quantitative research. Quantitative research is a kind of research that explained some phenomena with collecting numerical data that analyze by using mathematically based method. According to Roger (2015), states that quantitative research encompassed a range of concerned method with the systematic investigation of social phenomena, by using numerical or statistical data. Therefore, quantitative research involved assumes and measurement that the phenomena from the study can be measured. Quantitative research methods as the explaining of an issue or phenomenon through gathering data in numerical form and analysing with the aid of mathematical methods; in particular statistics.

One of the main characteristics of quantitative research is defining problems with variables, collecting measured data from participants, utilizing graphical and statistical techniques to analyse these numerical data false statements and carrying out research completely. Quantitative research is categorized into two types: experimental and non-experimental. This study uses an experimental approach with a quasi-experimental design. This study uses an experimental approach with a quasi-experimental design.

According to Sugiyono (2009), the quasi-experimental design is a study which is aimed at discovering the influence of particular treatment. This design covers quantitative data and statistical technique in analyzing the data. This design involves two tested treatment classes: the control and experimental classes. The quasi-experimental research procedures are outlined in the following table:

**Table 3.1 Research design**

Experimental Group	Pre-test	Treatment using Animation Movie	Post-test
Control Group	Pre-test	Treatment using English Text Book	Post-test

**B. Population and Sample**

Population is region of object or subject that have characteristic and quality which specified by the writer to study and the concluded. So, population not only people but also object and thing. According to Creswell (2018), population is any group of people that have one or more characteristics in common that become the researcher’s interest. The population of this research was students’ class XI of MA Al-Huda Kediri.

**Table 3.2 Population**

XI-1	20 Students
XI-2	20 Students
Total:	40 Students

Sample is the part of the population that will be investigated. Base on the population above the researcher took two classes as the sample of the research. The researcher selected XI-1 as the experimental class and XI-2 as the control class. Each class consisted of 20 students.

**C. Research Instruments**

Research instruments are tools used in the research for obtaining relevant data to research’s project and there are many alternatives from which to choose. In this research, the research instrument employed consisted of a pre-test, and post-test.

## **1. Test**

### **a) Pre-test**

Pre-test was taken before doing treatment process. According to Creswell (2014), test was done in first meeting to measure the students' ability in the first time. The researcher took the score to get the first information. The students get one pre-test was related about the vocabulary aspect that was given to them at the first meeting. The pre-test required students in both the experimental group and the control group to choose the correct answers. The form of pre-test was multiple choices. The test items are 20 questions for multiple choices.

### **b) Post-Test**

The post-test is a test after getting the treatment. According to Ary (2018), the purpose of the post- test is to know the students' scores and abilities after getting the treatment. The researcher used animation movie as media to improve students' vocabulary achievement during the treatment process before the post-test. Post-test is a measure on some attribute or characteristic that is assessed for participants in an experimental after treatment. Post-test will use to know student's vocabulary mastery after they will teach by using animation movie. The post-test required students in both the experimental group and the control group to choose the correct answers. The form of post-test was multiple choices. The test items are 20 questions.

## **D. Data Collection**

In collecting the data, the researcher will use the data from test and documentation.

### **1) Test**

The researcher gave the test in order to get accurate result about students' improvement of vocabulary mastery after being taught through animation movie from Disney. According to Brown (2004), stated that test is a method of measuring someone's knowledge, ability or performance in given specific field. Based on the statement above, test can be used to measure the students' ability or students' learning achievement.

## 2) Documentation

Documentation was used to see the process of applying animation movie and assembling data in written form as names of population, sample, and the English score of class XI at MA Al-Huda Kediri.

### E. Treatment Procedure

Meeting	Experimental Class (Animation Movie)	Control Class (Drilling Technique)	Activity
1	<ul style="list-style-type: none"> <li>- Opening and check attendance</li> <li>- Pre-Test</li> <li>- Researcher introduce and explain the animation movie.</li> </ul>	<ul style="list-style-type: none"> <li>- Opening and check attendance</li> <li>- Researcher introduce and explain drilling technique. Provide a list of target vocabulary.</li> </ul>	Introduction and Pre-Test
2	<ul style="list-style-type: none"> <li>- Students watch animation movie focusing on context usage of vocabulary.</li> <li>- Student identifying and discussing new vocabulary from the movie.</li> </ul>	<ul style="list-style-type: none"> <li>- Students practice pronunciation and sentence creation through repetition.</li> <li>- Students repeat the vocabulary practice using English Text-Book and create simple sentences.</li> </ul>	Treatment
3	<ul style="list-style-type: none"> <li>- Students are tasked with retelling the story from the animation using the new vocabulary.</li> <li>- Group activity: to enhance vocabulary retention.</li> </ul>	<ul style="list-style-type: none"> <li>- Students listen and repeat to vocabulary pronunciation drills</li> <li>- Students practice vocabulary in pairs</li> </ul>	Treatment
4	<ul style="list-style-type: none"> <li>- Post-Test</li> <li>- Closing</li> </ul>	<ul style="list-style-type: none"> <li>- Post-Test</li> <li>- Closing</li> </ul>	Post-Test and closing

## **F. Data Analysis**

Data analysis is the process of organizing the data to gain the reality of the pattern and form of the research. According to Han (2011), data analysis is done to create understanding for the data after following certain procedure final of the result of the students can be presented by the researcher to the readers. After data is collected, applying a data analysis technique is the final point. This study utilizes the SPSS 25 program to analyze the data that was gathered over a few weeks, including the pre-test, post-test, and student treatment.

By applying quantitative techniques, the SPSS program makes it easier to do and methodical calculations or analyses of information. The data processing method of choice is t-test. T-test can help compare the means of two groups. In this context, researchers can compare the average vocabulary scores of students who watched the animation movie as (experimental group) and that class who used text-book as (control group) to see is there any significant improvement of students' vocabulary mastery after being taught through animation movie at the class XI of MA Al-Huda Kediri.